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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.	
10/656,841	09/05/2003	David K. Platner	60,130-1721/03MRA0169	8384
26096	7590 02/16/2005		EXAM	INER
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD			TORRES, N	MELANIE
SUITE 350	IAI LL KOAD		ART UNIT	PAPER NUMBER
BIRMINGHAM, MI 48009			3683	

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	
<b>A</b> /		10/656,841	PLATNER ET AL.	
	Office Action Summary	Examiner	Art Unit	
1		Melanie Torres	3683	
	The MAILING DATE of this communication app	pears on the cover sheet with the	correspondence address	
Period fo				
THE - Exte after - If the - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	I36(a). In no event, however, may a reply be ly within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS fro e, cause the application to become ABANDON	timely filed  ays will be considered timely.  m the mailing date of this communication.  IED (35 U.S.C. § 133).	
Status				
1)⊠	Responsive to communication(s) filed on 22 L	<u> December 2004</u> .		
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This	s action is non-final.		
3)□	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
	closed in accordance with the practice under l	Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.	
Disposit	ion of Claims			
4)⊠	Claim(s) 1-22 is/are pending in the application	l.		
	4a) Of the above claim(s) is/are withdra	wn from consideration.		
· —	Claim(s) is/are allowed.	*		
	Claim(s) <u>1-22</u> is/are rejected.			
·	Claim(s) is/are objected to. Claim(s) are subject to restriction and/o	or election requirement		
ت (٥	claim(s) are subject to restriction and/c	or election requirement.		
Applicat	ion Papers			
· ·	The specification is objected to by the Examine			
10)	The drawing(s) filed on is/are: a) acc			
	Applicant may not request that any objection to the			
441	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E.		•	
י ייי	The datif of declaration is objected to by the E.	xammer. Note the attached Onit	CE ACTION OF TOTAL	
Priority (	under 35 U.S.C. § 119			
12)	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. § 119(	(a)-(d) or (f).	
a)	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority document		akina Na	
	2. Certified copies of the priority document			
	3. Copies of the certified copies of the price application from the International Burea		ved in this ivational stage	

Attachment(s)

1) 🗀	Notice	OI P	cererenc	es Citea (P10-69	12)	
2) 🔲	Notice	of C	)raftspe	rson's Patent Drav	wing Review	(PTO-948
$\sim$ $\Box$			o: 1		/DTO 4440	- DTO/05

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date \_\_\_\_\_.

4)	Interview Summary (PTO-413)
	Paper No(s)/Mail Date

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_.

\* See the attached detailed Office action for a list of the certified copies not received.

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 13-16 and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by McGibbon et al.

Re claims 13-16 and 19-22, McGibbon et al. discloses a method of making a composite leaf spring (10): to a rear attachment system mounted to a vehicle mainframe comprising the steps of; (1) forming a rearward leaf spring segment as an end of a composite leaf spring; (2) attaching a shear damper (24) between the rearward leaf spring segment and the vehicle mainframe such that the rearward leaf spring segment is longitudinally movable parallel to the vehicle mainframe as the shear damper moves in shear.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duchemin in view of McGibbon et al.

Re claims 1-6, Duchemin discloses a leaf spring (1) comprising: a forward leaf spring segment (right side) comprising an arcuate member (4) extending therefrom; a rearward leaf spring segment (left side) of a lesser depth and a greater width than said forward leaf spring segment; and a mounting segment (2) intermediate said forward leaf spring segment and said rearward leaf spring segment. As can be seen in figures, at least a portion of the forward leaf spring segment is of greater depth and lesser width than the rearward portion. (Figures 1-7) However, Duchemin does not teach wherein the leaf spring is a composite. McGibbon et al. teaches a composite leaf spring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a composite material in the spring of Duchemin since it is well known in the art that composites are lightweight.

5. Claims 7-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duchemin in view of McGibbon et al. and further in view of Davis et al. (US 4,623,133).

Re claims 7-15 and 18-22, Duchemin teaches a suspension comprising a leaf spring (1) comprising a forward leaf spring segment (right side) defining an arcuate segment (4), a rearward leaf spring segment (left side) and a mounting segment (2) intermediate said forward leaf spring segment and said rearward leaf spring segment. (Figures 1-7) However, Duchemin does not teach wherein the leaf spring is a solid composite. Davis et al. teaches a solid leaf spring. It would have been obvious to one

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of ordinary skill in the art at the time the invention was made to have made a leaf spring solid in order to increase it's strength. McGibbon et al. teaches a composite leaf spring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a composite material in the spring of Duchemin since it is well known in the art that composites are used for their strength. Further, Duchemin does not teach a rear attachment system comprising a shear damper mounted to the rearward spring segment. McGibbon et al. teach a rear attachment system comprising a shear damper (24) mounted to the rearward spring segment. It would have been obvious to one of ordinary skill in the art to have used the shear damper of McGibbon et al. in the system of Duchemin since it is well known that shear dampers are used in suspension systems to reduce the shear stresses on leaf spring suspensions.

### Response to Arguments

6. Applicant's arguments filed December 7, 2004 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It is acknowledged that Duchemin does not teach wherein the leaf spring is formed from a composite material. McGibbon et al. is relied upon for this teaching.

Further, applicant argues that Duchemin's leaf spring is not solid and that the retainer assembly would be inoperable. This argument is moot in view of the new rejection above.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The examiner maintains that the use of composites in leaf springs is well known in the art for its strength and lightweight characteristics.

#### Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703)308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Business Center (EBC) at 866-217-9197 (toll-free).

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

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February 10, 2005

Melasie Serres